

# STATE OF MICHIGAN



Statewide  
Safety



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## The Case for Traffic Safety . . .

Michigan has . . .

- 122,000 miles of highway
- 98.2 Billion vehicle miles traveled in 2002
- 400,000+ crashes yearly
  - 112,000+ crash injuries yearly
  - 1200 – 1400 fatalities yearly



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## Unacceptable Cost in terms of . . .

- Loss of Life – 1,328 Michigan, 2001 (42,000 Nationwide)
- Economic Impact- \$9.4 Billion loss to Michigan (\$230 Billion Nationwide)
- Every tragic event involves someone's family member!



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## AASHTO Safety Goal

**1.5 Fatalities per 100 Million VMT, 2002**  
(Michigan Fatalities – 1.34 per Million VMT)

**Reduce to**

**1.0 Fatalities per 100 Million VMT by 2008**  
(Save 350 lives per year in Michigan)

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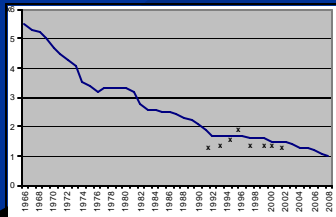
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## Aggressive Goal?

1.0 by 2008 United States Fatality Rate per  
100 Million Vehicle Miles Traveled

X Michigan Rate



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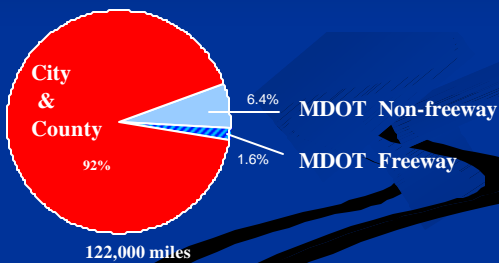
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## Michigan Road Mileage:



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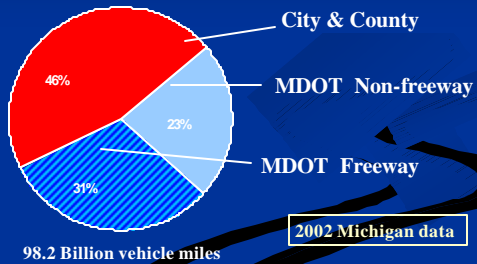
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## Michigan Traffic Volume:




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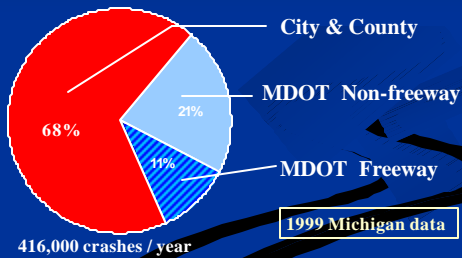
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## Michigan Traffic Crashes:




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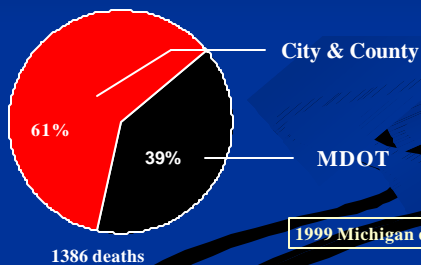
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## Michigan Traffic Deaths:




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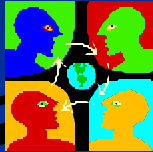
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## Integrated Approach to Highway Safety

### ■ Governor's Traffic Safety Advisory Commission

May 2002 (GTSAC)

- State & Local Governmental Agencies
- Safety and Insurance Industry
- Safety Advocacy Groups



"TOGETHER WE CAN SUCCEED"

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## 4 Es of Highway Safety

- Engineering
- Enforcement
- Emergency Medical Services
- Education

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## Highway Focus Areas

- Intersection Safety (29.5% fatal crashes)
- Roadway Departure (48.3% fatal crashes)
- Traffic Signal Timing and Modernization (15 year cycle)
- Geometrics/Hazard Elimination
- Young/Elder Driver Groups
- Highway Work Zones
- Seatbelt Use
- Crash Data Improvement

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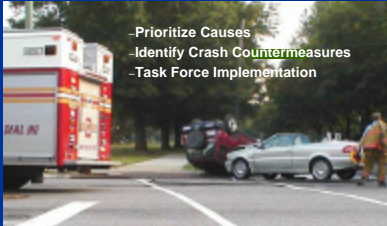
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## Intersection Safety Action Plan

- Currently Under Development by GTSAC



- Prioritize Causes
- Identify Crash Countermeasures
- Task Force Implementation

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## Roadway Departure Initiatives Shoulder Rumble Strips

- 48% fatal crashes – road departure
- Rumble Strips provide early warning or “wake up”
- Reduces drift-off crashes by 40%



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## Roadway Departure Initiatives Painting the Rumbles

- No additional cost when done in conjunction with rumble strip



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## Roadway Departure Initiatives

Painting the Rumbles



Wet, night time reflectivity

MSU/MDOT Research Project

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## Roadway Departure Initiatives Center Rumble Strips



Reduce  
cross-over,  
head-on  
crashes

Improve  
nighttime  
visibility of  
centerline

M-13  
Bay County  
2002

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## Traffic Signal Improvements

- 12" signal lens and improved placement
- Add turn lane
- Add turn phase



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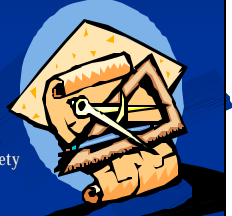
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## Geometrics/Hazard Elimination

- Safety Reviews (Road and Bridge Projects)
  - Safety analysis done to determine features requiring enhancements in response to crashes
  - Conformance to current design standards
  - 10 - 30% of cost in a project are safety related



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## Elder Drivers

- In 2001, 16% of drivers were 65 or over
- By 2020, 25% will be 65 or over
- Involvement in crashes has increased in last 10 years:
  - 18% of all crashes (44,393 in 2001)
  - 28% of fatal crashes (237 in 2001)
- 2004 Elderly Mobility National Conference - Detroit

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## Elder Drivers

### Initiatives being evaluated:

- Brighter Sign Legends– Overhead Guide Signs
- Enlarged Fonts on Guide Signs
- Brighter Warning Signs
- Increase edge line and gore pavement markings
  - Edge Lines 4" to 6"
  - Gore Markings 8" to 12"
  - Est Cost \$2.5 M/year

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## Highway Work Zones

- Nationwide, 80% of fatalities in work zones are drivers and their passengers
- In 2002, 17 people were killed in Michigan Work Zones
- In addition, 6,620 crashes and 1,726 injuries



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## Seat Belt Use

- 75% seat belt use National Average
- 83.9% seat belt use in Michigan – May 2003
- 100% use in Michigan would save 200 lives in 2004



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## Michigan Legislative Highway Safety Initiatives

- 0.08 BAC Law (July 2003)  
**500 lives saved yearly – nationwide**  
(\$3.22 Million incentive to Michigan in Sept. 2003)
- Work Zone Laws
  - Speed Limits
  - Double Fines - 1997
  - Andy's Law - 2001
  - Increase Points - 2002
- Graduated Drivers Licensing  
(In effect April, 1997. Crashes involving 16 year old drivers dropped 25% in 1999).
- Primary Seat Belt Law (March 2000)



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## Comprehensive Safety Approach!

"Buckle Up or Pay Up"

"You Drink & Drive - You Lose"

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